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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/635,708

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EXAMINER

LY, CHEYNE D

ART UNIT

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2168

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/635,708	Applicant(s) LOAIZA ET AL.	
	Examiner CHEYNE D. LY	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/29/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' arguments filed January 14, 2008 have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.
2. The Information Disclosure Statement, filed January 29, 2008, has been considered.
3. Claims 15-45 are examined on the merits.

RESPONSE TO ARGUMENTS

4. On pages 6-7, Applicant argues Downing does not disclose the limitation of "recovery logs" because the term "recovery" does not appear anywhere in the Downing reference. Applicant's argument is not persuasive because, as presented in the previous Office Action, the instant specification describes "recovery logs record information about the database data, such as changes to the database data or the state of database data as of a point in time" (page 1). Downing discloses logs such as "a master log" is for detecting a modification to the master table (column 3, lines 55-57). Therefore, the disclosure of logs for detecting changes in a database by Downing has been reasonably interpreted as the claimed "recovery logs."
5. Further, Applicant has argued the master logs of Downing does is for "recovery purposes." Applicant's argument is not persuasive because claim 1 merely recites "recovery logs", however, nowhere in the claim does applicant actually recite any recovery steps. Therefore, as discussed above, the master log of Downing reasonably anticipates the argued recovery logs because the claimed "recovery logs record information about the database data,

such as changes to the database data or the state of database data as of a point in time” (page 1) and Downing discloses “a master log” is for detecting a modification to the master table (column 3, lines 55-57).

6. On page 7, Applicant argues Downing does not “establishing a view of said one or more database recovery logs.” Applicant’s argument is not persuasive because Applicant describes “database view of a recovery log provides a virtual database table...” (page 2, [0022]).

While, Downing describes via Figures 5(a) to (c) the establishing of the database views of changes made to the "ORDER TABLE" by creating “ORDER LOG” Tables (column 7, line 46, to column 8, line 8).

7. Further, Applicant argues Downing does not disclose “insulating said view from a format of said one or more database recovery logs.” Applicant’s argument is not persuasive because Downing describes Order table is a table of orders, each row having an order identifier (OID) and a customer identifier (CID)...table 500 has been modified as the result of changing the customer identifier from 2 to 5 for the order identified by an OID of 4 in order table 500. Consequently, the primary key value of 4 is stored in a new entry 512 of order log 502 to identify the modified row. Since a row was updated, MOD\$\$ is an ‘U’ for update. OLD\$\$ is ‘U’ because neither the primary key value nor filter value is changed during the operation. CHG\$\$ has a zero in the first position of the bit vector to indicate that the OID column was unchanged and a one in the next position to indicate that the CID column was changed” (column 7, lines 45-64). As discussed above, table 500 has been modified with the OID of 4 which is shown in the log table (view) as “U” which represents the required “insulating said view from a format of said one or more database recovery logs.”

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 15-24, 26-34, and 36-44 are rejected under 35 U.S.C. 102(e)(2) as being anticipate by Downing et al. (US 6,289,335B1) (Downing hereafter).

CLAIM INTERPRETATIONS

10. The instant specification describes “recovery logs record information about the database data, such as changes to the database data or the state of database data as of a point in time” (page 1). Downing discloses logs such as “a master log” is for detecting a modification to the master table (column 3, lines 55-57). Therefore, the disclosure of logs for detecting changes in a database by Downing has been reasonably interpreted as the claimed “recovery logs.”

BASIS FOR PRIOR ART

11. In regard to claim 15, Downing discloses a method of accessing database recovery logs, said method comprising:

selecting one or more of said database recovery logs to access (column 7, line 13, e.g. “order line log”);

establishing a view of said one or more database recovery logs (Figures 5(a)-(c));

insulating said view from a format of said one or more database recovery logs

(Figures 5(a)-(c));

issuing a database statement to query said view (column 12, lines 15-38, e.g. QUERY 4a); and

retrieving data from said one or more database recovery logs in response to said database statement (column 12, lines 15-38, e.g. QUERY 4a).

12. In regard to claim 16, Downing discloses insulating said view comprises:

Generating a data dictionary snapshot (column 5, line 42, e.g. a snapshot definition query has been interpreted as data dictionary); and

Translating said data using said data dictionary snapshot (column 2, lines 1-9, e.g.

Since a snapshot also stores administrative information, the database system presents to Smith a snapshot view, which hides the administrative information).

13. In regard to claim 17, Downing discloses data is translated into an external data format (column 2, lines 1-9, e.g. a snapshot view, which hides the administrative information which represents an external format).

14. In regard to claim 18, Downing discloses time and/or date boundaries are established for said recovery logs (column 12, lines 15-38, e.g. QUERY 4a, especially, "TIME\$\$")

15. In regard to claim 19, Downing discloses wherein said database statement is a SQL statement (column 12, lines 15-38, e.g. QUERY 4a).

16. In regard to claim 20, Downing discloses said recovery logs comprise an a redo log (column 3, lines 55-60, e.g. "refresh").

17. In regard to claims 21 and 23, Downing discloses said view is a relational view comprising at least one row and at least one column (Figures 5(a)-(c)). The inclusion of Alexander et al. is not being used as prior art, but only to support that it is well known in the art that a "view is a relational table that does not exist in physical storage but is derived from one or more base tables (Alexander et al., column 2, lines 41-44).

18. In regard to claim 22, Downing discloses said view is formed from a plurality of said recovery logs (Figure 9(a) and (b), e.g. "process master logs").

19. In regard to claim 24, Downing discloses constructing a virtual table using data from said one or more database recovery logs (Figures 4(a) to (c), e.g. ORDER_LINE LOG), wherein a format of said virtual table is different than the format of said one or more database recovery logs (Figures 7(a) to (b), e.g. ORDER_LINE SNAPSHOT VIEW).

20. In regard to claims 26-34 and 36-44, Downing discloses the computer program and system (column 4, line 65, to column 5, line 39, and Figure 1) for the above cited method.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent

any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

23. Claims 25, 35, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Downing et al. (US 6,289,335B1) (Downing hereafter) as cited above.

24. Downing describes the claimed invention of claims 25, 35, and 45, However, Downing is silent about the limitation of “the format of said virtual table does not change when the format of said recover logs change.” As discussed above, Downing describes the views (virtual table) are specified by the query definitions. Further, as illustrated by the ORDER_LINE LOG (Figure 4(a) item 402, and Figure 7(a) item 402 wherein the formats of the respective virtual table is define by the query definitions which result the format being different from that of the ORDER_LINE LOG. Therefore, it would have been reasonable to interpreted that the format of said virtual table as defined by the query definitions does not change when the format of said recover logs change. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to recognize that the format of virtual table as defined by the query definitions in Downing does not change when the format of said recover logs change.

CONCLUSION

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

26. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

27. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

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28. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. The USPTO's official fax number is 571-272-8300.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (571) 272-0716. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo, can be reached on (571) 272-3642.

/Cheyne D Ly/

Primary Examiner, Art Unit 2168

<div>Application Number</div> <div></div>	Application/Control No.	Applicant(s)/Patent under Reexamination	
	10/635,708	LOAIZA ET AL.	
	Examiner	Art Unit	
	CHEYNE D. LY	2168	